

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA**

GLENN GATES, ET AL.,	:	CIVIL ACTION
Plaintiffs,	:	
	:	
v.	:	
	:	
ROHM AND HAAS COMPANY,	:	
ET AL.,	:	
Defendants	:	NO. 06-1743

MEMORANDUM

PRATTER, J.

MARCH 5, 2010

This case involves the alleged contamination of water and air by pollutants generated and released by Rohm and Haas Company, Rohm and Haas Chemicals, LLC, and Morton International, Inc. (collectively, “Rohm and Haas”).¹ Plaintiffs Glenn and Donna Gates bring claims pursuant to the Comprehensive Environmental Response Compensation and Liability Act of 1980 (“CERCLA”), 42 U.S.C. § 9601, *et seq.*, and pursuant to state law. They ask the Court to certify two classes: (1) a medical monitoring class, and (2) a property damage class. For the reasons set forth in this Memorandum, Plaintiffs’ motion for class certification is denied as to both proposed classes.

I. FACTUAL ALLEGATIONS

The parties are familiar with the factual background of this case, so the Court sets forth only those facts necessary for resolving the class certification issue. Plaintiffs allege that vinyl chloride released from Rohm and Haas’s specialty chemicals manufacturing facility in

¹ Defendants Huntsman and Huntsman Polyurethanes were dismissed without prejudice by stipulation on March 23, 2007. Defendant Modine reached a settlement with the Plaintiff class, which the Court approved. Accordingly, Rohm and Haas Company, Rohm and Haas Chemicals, LLC, and Morton International, Inc. (collectively, “Rohm and Haas”) are the only remaining defendants actively opposing class certification at this stage.

Ringwood, Illinois (the “Ringwood facility”) contaminated the groundwater in and around McCollum Lake Village (the “Village”), as well as the air in the Village. Specifically, Plaintiffs claim that the levels of vinyl chloride in the Village air are higher than the background level of 0.042 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)² and create a significantly increased risk for causing Village residents to develop brain cancer. They seek certification for the following claims: medical monitoring, public and private nuisance, negligent and intentional trespass, strict liability, negligence and negligence per se, CERCLA, and conspiracy. ³

The parties have stipulated to the following facts for purposes of class certification:

Since at least 1959, vinylidene chloride (1,1-DCE) has been used in manufacturing operations at the Ringwood facility, a facility owned and operated by Rohm and Haas and/or Morton since June 1999. Joint Stipulated Facts for Class Certification Hearing (“Stipulation”) at ¶¶ 1.9-1.11, 3.1. From 1960 until 1978, the Ringwood facility had an on-site lagoon/landfill, which was used for the disposal of waste water containing vinylidene chloride. Id. at ¶ 3.2. Under certain conditions, vinylidene chloride degrades to vinyl chloride, which is a Group 1A carcinogen. Id. at ¶¶ 3.3-3.4.

In 1973, tests of the shallow aquifer under the Ringwood facility showed elevated levels of ammonia and chloride downgradient of the lagoon/landfill. Id. at ¶ 3.6. These elevated levels indicated that chemicals were leaching from the lagoon/landfill. Id. at ¶ 3.7. Five years later, in 1978, the lagoon/landfill was closed and covered. Id. at ¶ 3.8. In 1984, Morton conducted an

² Plaintiffs and Rohm and Haas agree that this is the correct background level for purposes of the medical monitoring claim, and represents the level reported in the 1999 NATA data for McHenry County. See 6/12/2008 Hr’g Tr. at 177; 6/20/2008 Hr’g Tr. at 74.

³ Plaintiffs also bring a claim for fraud, but do not seek class certification for that claim. See 06/12/2008 Hr’g Tr. at 124-25.

environmental assessment at the Ringwood facility and installed 19 groundwater monitoring wells from which it collected and analyzed water samples. Id. at ¶ 3.9. These samples revealed the presence of vinylidene chloride and vinyl chloride in the groundwater beneath the facility. Id. at ¶ 3.10. Between 1984 and 1991, Morton installed 9 additional monitoring and recovery wells. Id. at ¶ 3.12. The Ringwood facility has been enrolled in the Illinois Environmental Protection Agency voluntary site remediation program since 1991. Id. at ¶ 3.13. As part of current remediation efforts, Rohm and Haas has drilled at least 14 monitoring wells. Id. at ¶ 3.21.

The parties agree that there is a deep, bedrock aquifer under the Ringwood facility, but disagree as to the direction of groundwater flow in that aquifer. Id. at ¶¶ 5.2.2, 5.2.3. The Plaintiffs allege that the deeper aquifer is the source of a plume of contamination (the “deeper plume” or “purple plume”) that flowed through an underground channel into the eastern part of the Village, causing contamination of Village wells.⁴ See id. at ¶¶ 5.2.4, 5.2.5. Rohm and Haas has drilled six monitoring wells into the deep aquifer. Id. at ¶ 3.21.⁵

The Village is located approximately a mile and a quarter from the Ringwood Facility. Id. at Ex. A. Residents in the Village depend on private wells for drinking water. Id. at ¶ 2.5. The depths of these private wells vary. Id. at ¶ 2.6. Prior to 2003, Village residents depended

⁴ On the map included in the Plaintiffs’ Reply Brief, the deeper plume is depicted in purple. See Pls.’ Reply Br. in Supp. of Class Cert. (“Pls.’ Reply Br.”) at 21.

⁵ Rohm and Haas uses data from these wells to try to “debunk” the Plaintiffs’ “purple plume” theory and argue that groundwater flows from the Ringwood facility to the southeast, not south toward the class area. See Rohm and Haas Supplemental Br. Addressing Recent Case Law in Opp. to Class Cert. at 7. This argument is no longer germane to class certification because, as explained later in this section, Plaintiffs now have refined their theories and seek class certification only on their “orange plume” theory.

exclusively on septic systems for waste disposal, but in that year a public sewer system became available. Id. at ¶ 2.7. Currently, the Village continues the process of connecting homes to the public sewer system. Id. At least 38 residential wells within the Village have been tested at various times between April 2006 and January 2007. Id. at ¶¶ 4.1-4.7. None of those well tests have detected vinylidene chloride or vinyl chloride, but some wells have shown elevated levels of chloride. Id. The parties disagree as to the extent of any vinyl chloride contamination of the Village wells, present or historical. Id. at ¶¶ 4.8.

The parties do agree that there is a shallow aquifer on Rohm and Haas's property with a plume of contamination (the "shallow plume" or "orange plume"⁶) that extends to the southeast of the Ringwood facility, and has a groundwater flow direction to the southeast, but does not reach the Village. Id. at ¶¶ 3.14, 3.17, 5.2.1. Both vinyl chloride and chloride have been detected in the shallow plume. Id. at ¶¶ 3.15-3.16. Over time, some amount of the vinyl chloride in the shallow plume of groundwater contamination "volatilized, or escaped into the air above the shallow plume." Id. at ¶ 5.1.1.

Plaintiffs allege that between 1968 and 2002, the vinyl chloride evaporating from the shallow plume blew over the Village, contaminating the air in the Village and causing some Village residents to breathe varying amounts of it. The parties disagree as to the extent to which vinyl chloride volatilized into the air above the shallow plume and was blown across the Village. Id. at ¶¶ 5.1.2, 5.1.3. In support of their theory, the Plaintiffs have submitted an affidavit and report by Paolo Zannetti, QEP. Id. at ¶ 5.1.4. In his report, Dr. Zannetti opines on the average levels of airborne vinyl chloride that reached the Village at certain points in time. Id. at ¶ 5.1.5.

⁶ On the map included in the Plaintiffs' reply brief, the shallow plume is depicted in orange. See Pl. Reply 21.

In response, Rohm and Haas has submitted the report of Peter J. Drivas, Ph.D., who disputes the opinions offered by Dr. Zannetti. Id. at ¶¶ 5.1.6-5.1.7.

Although Plaintiffs have alleged that the Village's water and air have been contaminated, as noted above, Plaintiffs seek class certification only on the "outdoor air" theory or "orange plume" theory. See 06/12/2008 Hr'g Tr. at 29-30.⁷

The parties dispute whether, and the extent to which, exposure to vinyl chloride is associated with brain cancer in humans. Id. at ¶ 6.1. The Plaintiffs allege that exposure to vinyl chloride placed Village residents at a higher-than-normal risk of contracting brain cancer. In support of this theory, the Plaintiffs have submitted the affidavit and report of Gary Ginsberg, Ph.D. Id. at ¶ 6.2. In response, Rohm and Haas has submitted the reports of Darell D. Bigner, M.D., Ph.D and Peter A. Valberg, Ph.D. Id. at ¶ 6.3. The parties' experts disagree about the risk of brain cancer, if any, posed by exposure to vinyl chloride. Id. at ¶ 6.4.

The parties also disagree as to the significance of the number of primary brain cancers among past and present Village residents. Id. at ¶ 7.3. Citing the affidavit/report of Richard Neugebauer, Ph.D, M.P.H., the Plaintiffs contend that these cases of brain cancer are evidence of the risk caused by exposure to vinyl chloride. See id. at ¶ 7.1. In response, Rohm and Haas has submitted the reports of Patricia A. Buffler, M.P.H., Ph.D and Gary M. Marsh, Ph.D, F.A.C.E. Id. at ¶ 7.2.

In addition, the Plaintiffs have submitted the report of Sydney Finkelstein, M.D., who opines that his analysis of brain tissue samples from Village residents who have been diagnosed

⁷ Plaintiffs' own evidence reflects that Plaintiffs' groundwater and "indoor air" theories of contamination would not apply to all members of the proposed classes and, therefore, would not aid Plaintiffs in their motion for class certification. See 06/20/2008 Hr'g Tr. at 112-15.

with brain cancer indicates that the cancerous condition was caused by exposure to “genotoxic chemicals.” Id. at ¶¶ 8.1-8.2. In response, Rohm and Haas has submitted the report of David N. Louis, M.D. Id. at ¶ 8.3.

Finally, the parties dispute whether serial MRI screening is appropriate for a population allegedly exposed to vinyl chloride. Id. at ¶ 9.1. In support of a medical monitoring program, the Plaintiffs have submitted the report of Melissa Neiman, M.D., who opines that a class-wide medical monitoring regime is medically reasonable given the alleged exposure to vinyl chloride. Id. at ¶¶ 9.2-9.3. In response, Rohm and Haas has submitted the report of Dr. Henry S. Friedman, M.D., who disputes Dr. Neiman’s opinions and opines that a medical monitoring regime is not medically reasonable for asymptomatic individuals. Id. at ¶¶ 9.4-9.5. ⁸

II. LEGAL STANDARDS

The class action device is appropriate in cases where it “saves the resources of both the courts and the parties by permitting an issue potentially affecting every [class member] to be litigated in an economical fashion under Rule 23.” General Telephone Southwest Co. of the Southwest v. Falcon, 457 U.S. 147, 155 (1982) (quoting Califano v. Yamasaki, 442 U.S. 682, 701 (1979)). “[F]ederal courts have ‘broad discretion in determining whether to certify a class.’” In re Welding Fume Prods. Liab. Litig., 245 F.R.D. 279, 303 (N.D. Ohio 2007) (quoting Cross v. National Trust Life Ins. Co., 553 F.2d 1026, 1029 (6th Cir. 1977)). ⁹

⁸ Upon the agreement of the parties, the Court has deferred decision on the Rohm and Haas Omnibus Motion to Exclude Reports and Testimony by Plaintiffs’ Experts until the merits phase of the case. See Joint Class Certification Hearing Plan at 2.

⁹ This “broad discretion” often produces wholly different results in actually or ostensibly similar situations. In In re Welding Fume Prods. Liab. Litig., 245 F.R.D. 279 (N.D. Ohio 2007), the court denied certification of a class of plaintiffs alleging an increased risk of neurological and neuropsychological disease from exposure to welding fumes, and seeking medical (cont...)

A party seeking class certification bears the burden of proving that the proposed class action satisfies the requirements of Federal Rule of Civil Procedure 23. Johnston v. HBO Film Mgmt., Inc., 265 F.3d 178, 183-84 (3d Cir. 2001). To meet this burden, plaintiffs must satisfy the four prerequisites of Rule 23(a) and show that the action can be maintained under at least one of the subsections of Rule 23(b). Id. (citing Amchem Prods., Inc. v. Windsor, 521 U.S. 591, 613 (1997)); Fed. R. Civ. P. 23.

Rule 23(a) requires that the movant for class certification demonstrates that:

- (1) the class is so numerous that joinder of all members is impracticable;
- (2) there are questions of law or fact common to the class; (3) the claims or defenses of the representative parties are typical of the claims or defenses of the class; and (4) the representative parties will fairly and adequately protect the interests of the class.

(cont...) monitoring and other relief. The court stated:

[T]here is no common set of factual circumstances predictive of whether a court will certify a medical monitoring class. It is easy to find cases, for example, where a court *granted* class certification to plaintiffs in a limited geographic region who sought medical monitoring after suffering single-source exposure to a toxin in their drinking water, and just as easy to find cases where a court *denied* certification under similar conditions - and there is no obvious or simple way to reconcile the two different results.”

Id. at 304 (emphasis in original). See also id. at 305, n.153 (comparing chemical exposure cases where class certification was granted with cases where certification was denied); LaBauve v. Olin Corp., 231 F.R.D. 632, 680 n.102 (S.D. Ala. 2005) (denying certification but noting that “the pragmatic truth that one cannot harmonize every interpretation of Rule 23 announced by every federal court in every factual scenario”). Compare Mejdrech v. Met-Coil Systems Corp., 319 F.3d 910 (7th Cir. 2003) (granting certification in chemical exposure case) and Yslava v. Hughes Aircraft Co., 845 F.Supp. 705 (D. Ariz. 1993) (same) with Thomas v. FAG Bearings Corp Inc., 846 F. Supp. 1400 (W.D. Mo. 1994) (denying certification in similar circumstances). The Court recognizes that the reality of these apparently contrasting results does not ameliorate the frustration that is an understandable by-product of the fact of such differences. Nonetheless, the fact that such different results can and do emanate from the courts does not mean that one result is absolutely “correct” while the other is utterly “wrong.” From the Court’s perspective, the recognition that arguably indistinguishable cases have led to different results prompts the Court to be particularly vigilant in closely examining the record in this case and the soundness of other certification decisions for guidance here.

Fed. R. Civ. P. 23(a).

As to Rule 23(b), Plaintiffs here move for certification of their property class under Rule 23(b)(3) and for certification of their medical monitoring class under both Rule 23(b)(2) and (b)(3). Rule 23(b)(2) permits certification where “the party opposing the class has acted or refused to act on grounds generally applicable to the class, so that final injunctive relief or corresponding declaratory relief is appropriate respecting the class as a whole.” Fed. R. Civ. P. 23(b)(2). Rule 23(b)(3) permits class actions where “the court finds that the questions of law or fact common to class members predominate over any questions affecting only individual members, and that a class action is superior to other available methods for fairly and efficiently adjudicating the controversy.” Fed. R. Civ. P. 23(b)(3).

The Third Circuit Court of Appeals clarified the legal standard for class certification and the district courts’ attendant duties in In re Hydrogen Peroxide Antitrust Litigation, 552 F.3d 305 (3d Cir. 2008). In that case, the district court had granted certification based on only threshold showings under Rule 23, and had failed to resolve significant disputes between expert witnesses that bore on the class certification decision. Finding that this was improper, the Court of Appeals stated that “the decision to certify a class calls for findings by the court, not merely a ‘threshold showing’ by a party, that each requirement of Rule 23 is met.” Id. at 307. “[P]roper analysis under Rule 23 requires rigorous consideration of all the evidence and arguments offered by the parties,” id. at 321, and district courts must “consider carefully all relevant evidence and make a definitive determination that the requirements of Rule 23 have been met before certifying a class,” id. at 320. District courts must “resolve all factual or legal disputes relevant to class certification, even if they overlap with the merits.” Id. at 307. “Factual determinations necessary to make Rule 23 findings must be made by a preponderance of the evidence.” Id. at

320. The Court of Appeals declared that a district court’s “obligation to consider all relevant evidence and arguments extends to expert testimony.” Id. at 307. “Weighing conflicting expert testimony at the certification stage is not only permissible; it may be integral to the rigorous analysis Rule 23 demands.” Id. at 323. “[A] district court may find it unnecessary to consider certain expert opinion with respect to a certification requirement, but it may not decline to resolve a genuine legal or factual dispute because of concern for an overlap with the merits. Genuine disputes with respect to Rule 23 requirements must be resolved, after considering all relevant evidence submitted by the parties.” Id. at 324 (internal citation omitted).

Applying these tenets, the Court of Appeals determined that class certification may have been improper because the defendants had offered evidence, including expert testimony, that called into question the plaintiffs’ arguments under the predominance inquiry of Rule 23(b)(3). Therefore, the Court of Appeals vacated the class certification order and remanded the case for another certification decision. See also Hohinder v. United Parcel Service, Inc., 574 F.3d 169, 171-72, 176-77, 197 n.23 (3d Cir. 2009) (reaffirming holding of In re Hydrogen Peroxide Antitrust Litigation, 552 F.3d 305 (3d Cir. 2008), that a district court must engage in a “rigorous analysis” of whether the requirements of Rule 23 have been satisfied and that such an analysis may require an inquiry into the merits, and the fact that there were common issues regarding plaintiffs’ general theory of liability was not a sufficient basis for certifying a class). Hydrogen Peroxide governs this Court’s consideration of the Gates’s efforts to pursue these claims on behalf of classes of their neighbors and/or former neighbors.

III. DISCUSSION

A. Class Definitions

Before delving into the Rule 23 analysis, the Court first must consider whether a precisely defined class exists and whether the named plaintiffs are members of the proposed class. East Texas Motor Freight Sys., Inc. v. Rodriguez, 431 U.S. 395, 403 (1977). The factors to consider include: (1) whether there is “a particular group that was harmed during a particular time frame, in a particular location, in a particular way”; and (2) whether class membership has been defined “in some objective manner.” Rowe v. E.I. Dupont de Nemours and Co., 262 F.R.D. 451, 455 (D.N.J. 2009). “Generally, a class will satisfy the definiteness requirement as long as it is defined in terms of objective criteria, such as the defendants’ conduct as opposed to the state of mind of the parties.” Bentley v. Honeywell Int’l, Inc., 223 F.R.D. 471, 477 (S.D. Ohio 2004) (internal citation omitted).

Plaintiffs seek certification of two classes: a “Medical Monitoring Class,” and a “Property Damage Class.”¹⁰ The proposed Medical Monitoring Class consists of:

All individuals who lived for one year or more in total (whether consecutively or not) within McCullom Lake Village during the time period from January 1, 1968 to December 31, 2002. Excluded from the class are individuals for whom brain cancer has been detected and individuals bringing claims in any court of competent jurisdiction arising out of exposure to chlorinated solvents.

Pls.’ Reply Br. at 25. The only substantive claim to be pursued by this class is one for medical monitoring. Since setting forth the above class definition, Plaintiffs have urged the Court to

¹⁰ In their Reply Brief, the Plaintiffs substantially modified the proposed class definitions initially set forth in their Complaint. See Pls.’ Reply Br. at 23. Sensibly, modification of a class definition is contemplated by the Federal Rules of Civil Procedure, see Fed. R. Civ. P. 23(c)(1), and a court “is not bound by the class definition proposed in the complaint,” Robidoux v. Celani, 987 F.2d 931, 937 (2d Cir. 1993).

modify the class definition to specifically exclude from the class those individuals with cancer of the brain or liver, as well as those with brain tumors and/or cryptogenic cirrhosis. See Pls.’ Mem. in Further Supp. of Pls.’ Mot. for Class Cert. at 11. Plaintiffs assert that such a modification will exclude from the class any individuals who, under their theory of the case, may be entitled to bring a current personal injury suit against Rohm and Haas. Id.¹¹

The proposed Property Damage Class consists of:

All persons who presently own real property within McCullom Lake Village, or who owned real property within the Village as of April 25, 2006 (the date of the filing of the Complaint) through the present. Excluded from the Class are individuals who have already brought claims in any court of competent jurisdiction arising out of exposure to chlorinated solvents.

Pls.’ Reply Br. at 25. The claims brought on behalf of this class are for public and private nuisance, negligent and intentional trespass, strict liability, negligence and negligence per se, CERCLA, and conspiracy.

B. Rule 23(a)

1. Numerosity

Numerosity requires a finding that the putative class is “so numerous that joinder of all members is impracticable.” Fed. R. Civ. P. 23(a). “No single magic number exists satisfying the numerosity requirement.” Behrend v. Comcast Corp., 245 F.R.D. 195, 202 (E.D. Pa. 2007) (internal citation omitted). However, the Third Circuit Court of Appeals often favorably considers classes of 40 or more. See Stewart v. Abraham, 275 F.3d 220, 226-27 (3d Cir. 2001).

¹¹ As for people with current personal injuries that do not fit Plaintiffs’ theory of the case, Plaintiffs urge that the Court should permit such people to opt-out of the litigation. See Pls.’ Mem. in Further Supp. of Pls.’ Mot. for Class Cert. at 11. The availability and usefulness of the “opt-out” mechanism is discussed later in this opinion.

The Plaintiffs here allege that there are approximately 400 homes in the Village, and approximately 1,000 current residents. Thus, the Medical Monitoring Class consists of at least 1,000 claimants, and the Property Damage Class consists of at least 400 claimants. The proposed classes include not only *current* residents and property owners, but also some unspecified number of *former* residents and property owners. Consequently, each class could number potentially in the thousands. Rohm and Haas does not dispute that the numerosity requirement is met here, see 06/13/2008 Hr'g Tr. at 61, and the Court agrees.

2. Commonality

To satisfy the commonality requirement, plaintiffs must show the existence of at least one question of law or fact common to the class. Fed. R. Civ. P. 23(a). The commonality threshold is low, Georgine v. Amchem Prods., Inc., 83 F.3d 610, 627 (3d Cir. 1996), and does not require “an identity of claims or facts among class members,” Johnston, 265 F.3d at 184; see Barnes v. American Tobacco Co., 161 F.3d 127, 141, n.15 (3d Cir. 1998). Moreover, “the existence of individualized issues in a proposed class action does not per se defeat commonality.” Brooks v. Educators Mut. Life Ins. Co., 206 F.R.D. 96, 101 (E.D. Pa. 2002) (citing Johnston, 265 F.3d at 191 (3d Cir. 2001)). “Indeed, the commonality requirement ‘may be satisfied by a single common issue.’” Rowe, 262 F.R.D. at 456 (quoting Baby Neal v. Casey, 43 F.3d 48, 56-58 (3d Cir. 1994)).

Because the “cohesiveness” requirement of Rule 23(b)(2) and the “predominance” requirement of Rule 23(b)(3)¹² overlap with the commonality requirement, the Court will discuss

¹² “[W]here an action is to proceed under Rule 23(b)(3), the commonality requirement is subsumed by the predominance requirement” because “it is far more demanding than the Rule 23(a)(2) commonality requirement.” Danvers Motor Co., Inc. v. Ford Motor Co., 543 F.3d 141, 148 (3d Cir. 2008) (internal quotations omitted).

commonality only briefly. The commonality requirement is met here because, for each claim the Plaintiffs assert, and regardless of whether the Court were to apply Illinois substantive law or Pennsylvania substantive law,¹³ there is at least one question of fact relating solely to Rohm and Haas's conduct, the nature and risks of vinyl chloride, and/or questions of law that are common to all class members. This suffices to satisfy the commonality requirement. Indeed, Rohm and Haas concedes that common questions are present here, and only argues that they do not "predominate." See 06/13/2008 Hr'g Tr. at 61. Accordingly, the Court concludes that there are common questions for both proposed classes, and the commonality requirement is satisfied as to each.

3. Typicality

To evaluate typicality, the Court must inquire "whether the named plaintiffs' claims are typical, in common-sense terms, of the class, thus suggesting that the incentives of the plaintiffs

¹³ The Court has not yet determined whether Illinois substantive law or Pennsylvania substantive law applies in this case. Rohm and Haas contends that Illinois law applies, while the Plaintiffs' reliance on Pennsylvania causes of action suggests that they take the position that Pennsylvania law applies.

Although Rule 23 makes no reference to choice-of-law issues, other courts have determined that such issues should be addressed at the certification stage because they can, and often do, pervade every inquiry of Rule 23. See In re Welding Fume Prods. Liab. Litig., 245 F.R.D. at 290-91 (collecting cases). This approach appears to be consistent with the Court of Appeals' directive to examine each element of a cause of action through the "prism" of Rule 23. In re Hydrogen Peroxide Antitrust Litig., 552 F.3d at 311.

In this case, however, the Court need not determine whether Illinois or Pennsylvania substantive law applies to Plaintiffs' claims, because the differences between them - if any - are immaterial to the Court's decision to deny class certification. See In re Welding Fume Prods. Liab. Litig., 245 F.R.D. at 290-93, 295-96 (noting that courts deciding whether to certify a class need only engage in a choice of law analysis if there is a true conflict between the laws of the different states; see also Phillips Petroleum Co. v. Shutts, 472 U.S. 797, 816-18 (1985)). Here, as explained below, the Court's decision to deny certification does not depend on any nuances or differences that may exist between arguably applicable Illinois substantive law and Pennsylvania substantive law.

are aligned with those of the class.” Beck v. Maximus, Inc., 457 F.3d 291, 295-296 (3d Cir. 2006) (quoting Baby Neal, 43 F.3d at 55). “The typicality requirement is intended to preclude certification of those cases where the legal theories of the named plaintiffs potentially conflict with those of the absentees.” Georgine, 83 F.3d at 631 (internal citation omitted). “The inquiry assesses whether the named plaintiffs have incentives that align with those of absent class members so that the absentees’ interests will be fairly represented.” Id. (internal citation omitted).

Here, the claims of the class representatives are similar to those of the other members of the proposed classes. All of the claims arise from and challenge the same course of allegedly unlawful conduct; the Gateses do not allege that they were singled out in any way. See In re Prudential Ins. Co., 148 F.3d 283, 312 (3d Cir. 1998) (holding that “the various forms [the class representatives’] injuries may take do not negate a finding of typicality, provided the cause of the injuries is some common wrong”) (internal citation omitted). Thus, the interests of the Gateses are similar to those of the class members, and generally align with the interests of the classes for purposes of the typicality inquiry. See id. at 311 (“The typicality requirement is designed to align the interests of the class and the class representatives so that the latter will work to benefit the entire class through the pursuit of their own goals.”) (internal citation omitted). Although the class members’ claims may be factually different, Plaintiffs have alleged one course of conduct giving rise to those claims, all of which are based on the same legal theory. This is sufficient to satisfy the typicality requirement of Rule 23(a)(3). See Barnes, 161 F.3d at 141; Arch v. American Tobacco Co., Inc., 175 F.R.D. 469, 478-79 (E.D. Pa. 1997). ⁴¹

¹⁴ But see In re Welding Fume Prods Liab. Litig., 245 F.R.D. at 303 (in toxic tort exposure case, court likened the typicality inquiry of Rule 23(a)(2) to the predominance requirement (cont...))

That being said, Rohm and Haas presents some strong arguments regarding the differences between the Gateses' claims and the claims of absent class members in the proposed classes. Primarily, these differences arise because the Gateses' claims are solely for medical monitoring and property loss, while other class members may have present or future claims for personal injuries. These arguments could be analyzed under the typicality requirement of Rule 23(a), but the Court considers them to be better analyzed in the context of the adequacy requirement.

4. Adequacy

Class representatives must "fairly and adequately protect the interests of the class." Fed. R. Civ. P. 23(a)(4). The adequacy inquiry "serves to uncover conflicts of interest between named parties and the class they seek to represent." Beck, 457 F.3d at 296 (quoting Amchem, 521 U.S. at 625). It "assures that the named plaintiffs' claims are not antagonistic to the class and that the attorneys for the class representatives are experienced and qualified to prosecute the claims on behalf of the entire class." Id. (internal quotation omitted). Thus, the Court "must determine whether the representatives' interests conflict with those of the class and whether the class attorney is capable of representing the class." Johnston, 265 F.3d at 185 (internal citation omitted).

At the outset, the Court concludes that class counsel appears to be adequate, and Rohm and Haas does not argue otherwise. Class counsel has vigorously pursued this lawsuit, successfully defeating several motions for partial summary judgment and ably representing the

(cont...) of Rule 23(b)(3), and denied certification of the proposed medical monitoring based on lack of typicality because there were too many meaningful differences among class members).

class members in various discovery disputes. Counsel appears to be appropriately mindful of applicable professional responsibility duties.

The other adequacy inquiry, however, is more problematic, and raises two basic categories of concern: (1) concern for class members who have (or believe they have) present injuries other than brain cancer; and (2) concern for class members who do not have (or do not believe they have) present injuries, but who may develop such injuries in the future.

As to the first category, Rohm and Haas asserts that the Gateses are not adequate representatives because they do not have, and are not suing for, any *present* personal injuries; rather, they are suing solely for medical monitoring and for property loss. According to Rohm and Haas, this creates a potential conflict because there may be absent class members who, unlike the Gateses, currently believe they have personal injuries. As articulated in Plaintiffs' Reply Brief, the proposed Medical Monitoring Class only excludes "individuals for whom *brain cancer* has been detected"; notably, it does *not* exclude individuals with other kinds of personal injuries resulting from exposure to chemical solvents. Pls.' Reply Br. 25. Even with the modification subsequently proposed by Plaintiffs, see Pls.' Mem. in Further Supp. of Pls.' Mot. for Class Cert. at 11, the class may still include people with certain present personal injuries. Similarly, the Property Damages Class only excludes individuals "who have already brought claims in any court of competent jurisdiction arising out of exposure to chlorinated solvents." Pls.' Reply Br. 25. Examining these two proposed classes, the Court recognizes that there is a risk that claims arising from such injuries will be barred in a later action because of the general rule against claim-splitting.

Although the Court cannot prejudge the res judicata effects of a decision, the Court does not believe that the *risk* of claim-splitting with present personal injuries is fatal to certification.

First, similar arguments have been rejected in other cases.¹⁵ Second, here it appears that the vast majority of absent class members do *not* have present physical injuries; if they did, they likely would have sued individually, just as some of their neighbors have done. In the years since this suit commenced, there have been several individual suits brought in state court on behalf of residents with present physical injuries. There also has been a tremendous amount of general and targeted publicity concerning the alleged contamination. This is not a case where the absent class members would likely be unaware of the ongoing litigation and/or unaware of the option to sue as individuals.

Third, it is likely that any potential conflict could be resolved by amending the class definitions to exclude any individuals who presently have *any* physical injury as a result of the Defendants' conduct. See, e.g., Bratcher v. Nat'l Standard Life Ins. Co., 365 F.3d 408, 414 (5th Cir. 2004). Additionally, as Plaintiffs point out, the "opt-out" mechanism may be available for class members with present personal injuries.¹⁶ All things considered, the Court concludes that,

¹⁵ For example, in Muniz v. Rexnord Corp., No. 04-2405, 2005 U.S. Dist. LEXIS 10472 (N.D. Ill. Feb. 10, 2005), a groundwater contamination class action, the defendants argued that the named plaintiffs were inadequate class representatives because they were pursuing only property damage claims, and thus neglecting other potential claims of absent class members, such as personal injury claims. Id. at **14-154. The court rejected this argument and held that a class action suit seeking damages for property damage "would not bar and/or prejudice any personal injury claims that the class member may have." Id. at *15. See Cooper v. Federal Reserve Bank of Richmond, 467 U.S. 867, 880 (1984) (stating that "a class judgment . . . binds class members as to matters actually litigated but does not resolve any claim based on individual circumstances that was not addressed in the class action."). See also Cameron v. Tomes, 990 F.2d 14, 17 (1st Cir. 1993) (stating that Cooper "confirmed what common sense would suggest").

¹⁶ Plaintiffs have moved to certify the property damage class under Rule 23(b)(3), and the medical monitoring class under Rule 23(b)(2), or in the alternative, Rule 23(b)(3). See Pls.' Reply Br. at 56. They assert that the opt-out mechanism is available under both 23(b)(3) and 23(b)(2), but the Court is less sanguine that opt-outs are permitted under Rule 23(b)(2), at least in the context of this case. See discussion in footnote 38, infra. Regardless, the Court need not resolve this issue to conclude that certification is inappropriate here.

from a practical standpoint, the absent class members who currently have (or believe they have) personal injuries do not present a great impediment to certification.

The Court now turns to the second category: concern for class members who do not have (or do not believe they have) *present* injuries, but who may develop such injuries in the *future*. These class members, Rohm and Haas argues, may be barred from pursuing claims based on future injuries by rules against claim splitting and/or res judicata.

Such a result likely would not occur if Pennsylvania substantive law were held to apply. See Barnes, 161 F.3d at 141, n.17; Arch, 175 F.R.D. at 480; but see Hansen v. Wyeth, Inc., 77 Pa. D&C 4th 501, 548 (C.P. Phila. Cty. 2005) (“The two-disease rule . . . has never been applied by any appellate court beyond asbestos litigation). However, if Illinois substantive law were held to apply to future claims for personal injuries (injuries which have not yet manifested, and about which class members would have no reason to know), it is possible that the Illinois single-recovery rule might bar claims for future injuries. See Gates v. Rohm and Haas Co., 618 F. Supp. 2d 362, 365 (noting that in Illinois, the single recovery principle “requires that all damages, future as well as past, must be presented and considered at the time of trial”) (quoting Dillon v. Evanston Hosp., 771 N.E.2d 357, 369 (Ill. 2002)); see also Hicks v. Hines Inc., 826 F.2d 1543, 1545-47 (6th Cir. 1987) (plaintiff barred from bladder cancer action based on chemical exposure because claim for all “existing and potential” injuries accrued when he suffered blindness from same exposure years earlier); Mason v. Parker, 695 N.E. 2d 70, 71-72 (Ill. App. 1998) (plaintiff who recovered for property damage from car accident barred from later suing for personal injuries). This legal hazard would not be ameliorated through the opt-out mechanism, because class members who have not yet developed personal injuries would have no

incentive to opt-out of the medical monitoring class.¹⁷ If the Gateses are jeopardizing the other class members' potential future claims for personal injury damages, they may be deemed to have interests "antagonistic" to those of other classes, which could defeat adequacy. See Arch, 175 F.R.D. at 479-80.

That being said, the risk of this possibility does appear to be low. First, Illinois law may not apply to the claims in this case. Second, even if Illinois law applies, a future court would not necessarily apply the single-recovery rule to bar future personal injury claims stemming from exposure to vinyl chloride, on the theory that the claims should have been brought in this action. See Miles v. Phillip Morris Companies, No. 00 L 0112, 2001 WL 34366710, at *2 (Ill. App. Feb. 1, 2001) (granting class certification in case for purchase price of light cigarettes, and holding that certain claims related to the smoking of cigarettes were "specifically preserved" for the future). The entire point of claim preclusion is to prevent future actions on grounds that *could have been raised* in an earlier action, not to prevent future actions on grounds that *did not yet exist* (and therefore could *not* have been raised) in an earlier action.

To decide whether to certify the proposed medical monitoring class, the Court need not determine the precise effect of the Illinois so-called single recovery rule, or determine whether Illinois or Pennsylvania substantive law applies to this case.¹⁸ Based on the foregoing, the Court assumes without deciding that the adequacy requirement of Rule 23(a) can be met for both of the

¹⁷ See In re MTBE Prods. Liab. Litig., 209 F.R.D. 323, 338 n.23 (S.D. N.Y. 2002) (refusing to certify class under Rules 23(b)(2) or (b)(3) where "the right to opt out does nothing to protect unraised personal injury claims of those class members who decide not to opt out") (internal quotations omitted). See also id. at 348-50.

¹⁸ See discussion in footnote 13, supra.

proposed Classes, even though, as explained below, certification must be denied on other grounds.

C. Rule 23(b)

Beyond meeting the requirements of Rule 23(a), the Plaintiffs must also demonstrate that at least one of the requirements set forth in Rule 23(b) is met. Here, as stated above, the Plaintiffs seek to certify the Medical Monitoring Class under Rule 23(b)(2) and/or Rule 23(b)(3),¹⁹ and the Property Damage Class under Rule 23(b)(3). The Court will address the Medical Monitoring Class first.

1. Medical Monitoring Class - Certification Under Rule 23(b)(3)

Rule 23(b)(3) requires that “[i]ssues common to the class must predominate over individual issues.” In re Hydrogen Peroxide Antitrust Litig., 552 F.3d at 311 (internal quotations omitted). Whether a particular issue is “common” or “individual” depends on the nature of the evidence necessary to resolve the issue. Id. Therefore, “a district court must formulate some prediction as to how specific issues will play out in order to determine whether common or individual issues predominate in a given case.” Id. (internal quotations omitted). “[T]he task for plaintiffs at class certification is to demonstrate that [each] element . . . is capable of proof at trial through evidence that is common to the class rather than individual to its members.” Id. at

¹⁹ “The Manual for Complex Litigation observes that ‘[c]ourts are divided over whether Rule 23(b)(2) or 23(b)(3) is the appropriate vehicle for certifying a mass tort class for medical monitoring.’” In re Welding Fume Prods. Liab. Litig., 245 F.R.D. at 290 (quoting Manual for Complex Litigation § 22.74 at 427 (4th ed. 2004) (footnote omitted). Where the relief sought is a court-supervised, court-managed program of periodic medical monitoring, as opposed to money damages, Rule 23(b)(2) is generally favored. Id. Here, Plaintiffs seek certification of the medical monitoring class under either Rule 23(b)(2) or 23(b)(3); for the reasons discussed infra, the Court’s decision on certification is the same, regardless of which sub-part of the Rule is invoked.

311-12. In other words, the elements of the claims must be examined through the “prism” of Rule 23. Id. at 311.

To determine the nature and extent of any individual issues, the parties look to the elements of the cause of action. This Court already has predicted that, conceptually, the Illinois Supreme Court would recognize a claim for medical monitoring under Illinois law. See Gates v. Rohm and Haas Co., 618 F. Supp. 2d 362 (E.D. Pa. 2007). However, a theory for such a claim is not yet fully developed under Illinois law. Because Pennsylvania law appears consistent with Illinois law in this respect, both parties look to Pennsylvania law to delineate the elements of a medical monitoring claim. They are as follows:

- (1) exposure greater than normal background levels;
- (2) to a proven hazardous substance;
- (3) caused by the defendant’s negligence;
- (4) as a proximate result of the exposure, plaintiff has a significantly increased risk of contracting a serious latent disease;
- (5) a monitoring procedure exists that makes the early detection of the disease possible;
- (6) the prescribed monitoring regime is different from that normally recommended in the absence of the exposure; and
- (7) the prescribed monitoring regime is reasonably necessary according to contemporary scientific principles.

Redland Soccer Club, Inc. v. Dep’t of the Army, 696 A.2d 137, 145-46 (Pa. 1997); see Barnes, 161 F.3d 127, 138-39.

a. Background - Contamination Theories

No test of any well in the Village to date has shown the presence of vinyl chloride. The Plaintiffs’ theory for class certification, however, does not rely on the presence of vinyl chloride in Village groundwater. Instead, stated most succinctly, Plaintiffs’ theory is that a shallow aquifer about a mile north of the Village – the “orange plume” – contained vinyl chloride, which volatilized into the air, leaving behind only trace chemicals, such as chloride. The theory

continues to posit that the contaminated air then dispersed across the Village, affecting all individuals and property in the Village. Rohm and Hass, not surprisingly, disagrees with this theory and with the evidence offered in support of it.

Much of the parties' debate - and significantly, their contrasting expert testimony - concerns issues that the Court need not address at the certification stage of the litigation. In recognition of this, the parties have requested that the Court defer ruling on Defendants' Omnibus Daubert motion until after class certification, which the Court has agreed to do. Accordingly, the Court will not resolve any conflicts in expert testimony that are not necessary to the Court's decision on certification. In accord with In re Hydrogen Peroxide Antitrust Litigation, 552 F.3d 305 (3d Cir. 2008), however, the Court *will* use a preponderance standard to resolve all issues necessary for its decision on Plaintiffs' motion for class certification.²⁰

Regarding the elements of a medical monitoring claim, the Court notes that whether vinyl chloride is a hazardous substance,²¹ whether a responsible monitoring procedure exists that

²⁰ In a brief submitted after the In re Hydrogen Peroxide Antitrust Litigation opinion was issued, Plaintiffs stated that they "welcome a rigorous analysis of their evidence in support of class certification." Pls.' Supplemental Br. in Supp. of Class Cert. at 1. Notably, Plaintiffs did not request to submit further expert evidence or ask the Court to resolve Rohm and Haas's Omnibus Daubert motion prior to deciding certification.

²¹ Rohm and Haas argues that the extent to which vinyl chloride is "hazardous" for a particular individual may depend, to some extent, on individualized inquiries regarding each class member's height, weight, breathing rate, medical history, physiology, and the presence or absence of particular enzymes in an individual's body. See Ginsberg I Dep. 58-59, 134-39, 229-35, 237-38. Rohm and Haas also argues that these individualized factors contribute to the precise degree of "risk" that each person experiences from a given level of vinyl chloride. Surreply Br. of Defs. in Opp. to Pls.' Mot. for Class Cert. at 7.

The Court understands that these individualized factors may affect the precise degree to which vinyl chloride is carcinogenic for different people. However, these factors, without more, likely do not raise determinative individual questions with respect to the question of whether vinyl chloride is considered a "hazardous" substance or whether an individual has been exposed to a level of vinyl chloride sufficient to support a significantly increased risk. At some (cont...)

makes the early detection of the disease possible, and whether the prescribed monitoring regime is different from that normally recommended in the absence of the exposure, do not appear to present individualized questions in the context of this case. Accordingly, the Court will limit its discussion to the remainder of the medical monitoring elements.

b. Exposure Greater than Background Levels

The Third Circuit Court of Appeals previously has noted that “individualized issues can become overwhelming in actions involving long-term mass torts (i.e. those which do not arise out of a single accident).” Georgine, 83 F.3d 610, 628 (3d Cir. 1996).²² In evaluating class certification, the key question is whether each plaintiff in the proposed class was exposed to a level greater than the normal background level. In re Paoli Railroad Yard PCB Litig., 113 F.3d 444, 459 (3d Cir. 1997). The rationale for this requirement is simple: a defendant will not be held responsible for causing an exposure that is comparable to “what ordinarily entered a person’s body in every day life, elsewhere in the . . . area.” Id. As noted earlier, here the parties agree that the applicable background level is 0.042 µg/m³. Thus, Plaintiffs must demonstrate that common proof may be used to determine whether each and every Class Member was

(cont...) point, a given chemical must be considered “hazardous” to all humans, for purposes of exposure claims - even if it does not actually cause harm in everyone exposed to it because of physiological differences. Similarly, at some point, a given amount of that chemical must be considered sufficient to support a significantly increased risk – even if it does not actually cause harm in everyone exposed to it because of physiological differences.

At any rate, here there are more compelling reasons to deny certification, namely, that Plaintiffs’ evidence is avowedly based on *average* exposures, and Plaintiffs cannot demonstrate that every proposed class member was exposed to a level of vinyl chloride above background level, let alone to a level that would carry a significantly increased risk of a latent disease.

²² The Georgine decision was issued in the context of a motion to certify a personal injury class, rather than a medical monitoring class; however, the point regarding individual issues remains instructive.

exposed to a minimum level of vinyl chloride by Rohm and Hass that exceeds the applicable 0.042 background level.³²

Based on the reports and testimony of their experts, the Plaintiffs argue that they do not, and need not, seek to prove the *actual* exposure level for any given class member. Indeed, they admit that “individual exposure [to vinyl chloride] will vary depending on factors such as the time spent in the Village” Pls.’ Reply Br. at 53-54. Instead, Plaintiffs assert that class treatment is appropriate because there is a common *minimum average daily exposure rate* over time for any point within the Village, which they calculate to be 0.127 $\mu\text{g}/\text{m}^3$, a value that exceeds the 0.042 $\mu\text{g}/\text{m}^3$ background level of vinyl chloride. *Id.* at 54. To arrive at this 0.127 $\mu\text{g}/\text{m}^3$ minimum average daily exposure rate, Plaintiffs rely heavily on the expert testimony of Dr. Ginsberg, who in turn relies on data generated by other of Plaintiffs’ experts, notably Drs. Oberdorfer and Zannetti.

Drs. Oberdorfer and Zannetti used monitoring well data to simulate annual average concentrations of vinyl chloride in the air during four distinct periods of time (1940-1967, 1968-1989, 1990-1996, and 1997-2006) under two different “emission scenarios” at the spot on the

²³ The Third Circuit Court of Appeals has identified a “potential limited exception to the general requirement that plaintiffs demonstrate above-background level exposure, an exception that ensures that the most egregious polluters, those who cause abnormally high degrees of contaminants to permeate an entire geographical area, do not escape medical monitoring liability by virtue of their own extraordinary malfeasance.” *In re Paoli Railroad Yard PCB Litig. (“Paoli III”)*, 113 F.3d 444, 461 (3d Cir. 1997). This exception is triggered when the defendant’s contamination is so severe that it is responsible for much of the “baseline” background level itself. *See id.* at 460-62. Here, the expert testimony and other evidence does not indicate that Rohm and Haas’s contamination was so severe that it altered the background level of vinyl chloride in the area, rendering it unusable for purposes of a medical monitoring claim. *See* Ginsberg Testimony, 6/20/2008 Hr’g Tr. at 146-47. In other words, it is *not* the case that if one took Rohm and Haas out of the equation, the remaining background level of vinyl chloride in the County would be dramatically reduced. *See id.*

northern edge of the Village that is closest to the orange plume. Expert Report of EnviroComp (“EnviroComp Report”) at 22, 34-35; Expert Report of Gary Ginsberg, Ph.D. (“Ginsberg Report”) at 34. The first set of data, or “low scenario,” was produced by taking the average concentrations in the sampled wells and combining them to form an overall average air concentration for each of the selected time periods. Deposition Tr. of June Ann Oberdorfer (11/05/2007) (“Oberdorfer Dep.”) at 40-41; see also EnviroComp Report at 34; Ginsberg Report at 34. Because monitoring well data does not exist for all time periods, Plaintiffs experts made certain assumptions to calculate concentrations. Oberdorfer Dep. at 40. The second set of data, the “high scenario,” was produced by taking the highest single reading of any of the sampled wells during each time period, and using that reading to form an air concentration for each time period. EnviroComp Report at 22, 34; Ginsberg Report at 34; Oberdorfer Dep. at 40-49, 52-53.

Using the “high scenario” figures from the spot on the northern edge of the Village,²⁴ Dr. Zannetti and his team conducted air modeling of the vinyl chloride concentrations and calculated the extent to which the emissions migrated to the Village under his “high scenario” assumption during those four discrete time periods beginning in 1940 and ending in 2006. For each time period, Dr. Zannetti drew an isopleth map depicting the different levels of vinyl chloride concentration in the outdoor air at different distances from the orange plume based on his assumptions. EnviroComp Report at 22-26.

²⁴ Notably, with respect to the “high scenario,” only *one* air concentration value was calculated for each of the designated time periods for the spot in the Village closest to the orange plume. So, for example, one air concentration value was applied to the entire time period between 1940 and 1967, and then a *different* air concentration value was applied to the entire time period between 1968 and 1989.

Dr. Zannetti did not testify at the three-day certification hearing in this case. Instead, Plaintiffs presented the testimony of Dr. Ginsberg in regard to exposure levels of the class. Dr. Ginsberg used Drs. Oberdorfer and Zannetti's work²⁵ to calculate an "exposure estimate," representing the average alleged 0.127 $\mu\text{g}/\text{m}^3$ outdoor air concentration of vinyl chloride in the Village for the 25-year period from 1978 to 2002. Ginsberg Report at 34.²⁶

²⁵ Dr. Ginsberg described his calculation of the 0.127 figure in two different, contradictory ways. At the evidentiary hearing on this matter, Dr. Ginsberg testified that he "averaged the concentrations across [Dr. Zannetti's] isopleths to get a central tendency for the exposure over a twenty-five year period to vinyl chloride that would be averaged across the village." 06/20/2008 Hr'g Tr. at 65-66. Dr. Ginsberg further testified that he based his 0.127 $\mu\text{g}/\text{m}^3$ calculation on Dr. Zannetti's isopleths maps, such that his number "used both ends of his isopleths distribution. One was at the closer end to the contamination, one was at the further end." *Id.* at 128.

At his deposition, however, Dr. Ginsberg stated that he only took Dr. Zannetti's "high scenario" figures from Dr. Zannetti's figure 6.1, which calculated only for the point of the Village that is closest to the orange plume. Deposition Tr. of Gary Ginsberg (11/08/2007) ("Ginsberg Dep. II") at 179-81, *see also* EnviroComp Report at 34. Dr. Ginsberg further testified that he took the "high scenario" number applicable to each of the years he was interested in (1978 to 2002), added them up, and then simply divided by 25 to get a further average. Ginsberg Dep. II at 179-81.

Having examined Dr. Ginsberg's Report, deposition testimony, and testimony at the class certification hearing, it appears that Dr. Ginsberg's "high scenario" explanation during his deposition (and not his "special averaging" explanation at the class certification hearing) is most consistent with the methodology that Dr. Ginsberg used to calculate the 0.127 value. Regardless, under either of Dr. Ginsberg's explanations (both of which employ an averaging technique), certification is inappropriate. Suffice it to say, an average is an average is an average. It is, in essence, a convenient fiction made up of numbers that are higher and lower than the average; it does not reflect whether *every* putative class member was exposed to vinyl chloride at a level above background, let alone at a level that carries a significantly increased risk of a latent disease.

²⁶ Dr. Ginsberg also testified as to the risk of brain cancer posed by such exposure. *See, e.g.*, 06/20/2008 Hr'g Tr. at 79-82.

The 0.127 average value was derived solely from the “high scenario” numbers for the at-issue years discussed earlier²⁷ even though Dr. Ginsberg admitted that Dr. Zannetti’s “low” scenario for air emissions is “equally as plausible” as the high. Deposition Tr. of Gary Ginsberg (11/08/2007) (“Ginsberg Dep. II”) at 188-89; 6/20/2008 Hr’g Tr. at 123. Notably, Dr. Ginsberg testified that he used the “high scenario” to measure “what the risk *could* have been as high as.” Ginsberg Dep. II at 190-91 (emphasis added). If the “low” scenario numbers had been used, Dr. Ginsberg agrees, the “average” exposure would be 0.011 µg/m³, much lower than the background level of 0.042 µg/m³. See 2/20/2008 Hr’g Tr. at 73-74, 123. Dr. Ginsberg defended his use of the “high scenario” figures because “there’s a lot of data that we don’t have,” and the “high scenario” figures were “extrapolations” that he found useful because “when there is uncertainty in an area you don’t want to underestimate the potential exposure when you look at the average.” 06/20/2008 Hr’g Tr. at 67, 70.

A “rigorous analysis” of Plaintiffs’ expert evidence reveals that it does not reflect that *all* class members were exposed to vinyl chloride at a minimum level above background, or that this determination can be made with common proof. In Plaintiffs’ Reply, they stated that Dr. Ginsberg would testify about the minimum exposure levels for each Village resident. See Pls.’ Reply Br. at 32. However, the evidence reflects that Dr. Ginsberg’s calculations involve *average*

²⁷ Dr. Ginsberg also developed a second “exposure estimate” for individuals living in a house above the deeper (purple) plume for the 25-year period between 1978 and 2002, who used well water to take showers, wash dishes and engage in other household activities (“indoor estimate”). 06/20/2008 Hr’g Tr. at 112-14. This indoor estimate is much higher than the estimate for outdoor exposure. However, Plaintiffs assert that the outdoor number is sufficient for class certification purposes, and their arguments throughout the certification process have been focused on the outdoor number. See 06/12/2008 Hr’ Tr. at 29-30. Also, Plaintiffs do not contend that the higher indoor estimate could apply to all individuals in the proposed classes, given that by definition it only applies to certain individuals living above the deeper plume. See 6/20/2008 Hr’g Tr. at 112-15.

exposure levels, not *minimum* exposure levels. As Dr. Ginsberg himself testified, the 0.127 value he calculated does not reflect the *minimum* level to which everyone in the proposed class was exposed. Rather, it is the *average* exposure calculated over the span of 25 years. See 6/20/08 Hr’g Tr. at 66, 135, 156-57. Dr. Ginsberg conceded that some proposed class members would be above this average value, and others would be below it. 6/20/08 Hr’g Tr. at 135, 148, 157-58. He further stated that for any given individual, one would not look at the 0.127 number at all, but would look at the actual exposure for that person, which in some cases may be below the ambient or background level. See 6/20/2008 Hr’g Tr. at 126-27. The testimony and reports of Plaintiffs’ experts reflect that they used particularly advantageous data, for a location in the Village that was likely to have greater vinyl chloride exposure than other points in the Village, and then calculated an average exposure across the entire proposed class period. No matter what else can be said about it, this calculation of an “advantageous average” says nothing about a common minimum level of exposure. See 6/12/2008 Hr’g Tr. at 167-68.

Moreover, Dr. Ginsberg specifically admitted that exposures in the Village would vary from year to year - though he did not attempt to calculate these variations - such that a putative class member’s exposure would depend on the particular year or years in which he or she lived in the Village. See 6/20/08 Tr. at 125-27, 157-58. From a class certification perspective, this variation in exposure is fatal for including within the proposed class individuals living in the Village toward the end of the proposed class period, when exposures were the least. See, e.g., 6/20/2008 Hr’g Tr. at 158.

Expert evidence from both Plaintiffs and Rohm and Haas reflects that individual class members’ locations and lifestyles potentially could result in significant differences in exposure, making Plaintiffs’ calculation of an “average exposure” even *less* useful. See 6/12/2008 Hr’g

Tr. at 151-53, 156-57; 6/20/08 Hr'g Tr. at 114, 134, 139. The time that each Village resident spent indoors, as opposed to outdoors, and the time that each individual spent away from the Village at work, away at school, on extended vacations, for example, are factors that raise significant individual issues with respect to exposure levels. The evidence reflects that the putative class members' habits, work schedules, and school schedules may have caused significant variations in the time that class members actually spent in the Village.²⁸ See 6/12/2008 Hr'g Tr. at 151-52; Rubuttal Report of Peter Drivas, Ph.D. at 2; Rebuttal Report of Peter Valberg Ph.D at 14.

The evidence reflects that McCullom Lake Village is a primarily residential community, Supplemental Affidavit of Richard Roddewig at 8, and a number of its residents worked out of town. See e.g. Deposition Tr. of Glenn Gates (12/18/2006) at 7-10 (local employment outside of McCullom Lake Village); Deposition Tr. of Donna Gates (12/18/2006) at 5-9 (same); Deposition Tr. of Joanne Branham Dep. I (7/9/2007) at 75-76, 81-85, 288-89 (same); Deposition Tr. of Joseph Zakrocky (1/5/2007) at 42-43 (same); Deposition Tr. of Edwin Begley Jr. (1/5/2007) at 13-14 (same); Deposition Tr. of Bryan Freund (9/5/2007) at 115-16 (same); Deposition Tr. of Frank Weisheit (10/16/2007) at 108 (same). The exposures of the Village residents would vary, for example, between that of a salesman who lived in the Village but worked outside of the Village during the day, and a stay-at-home retiree who spent the majority of both days and nights

²⁸ The fact that the proposed medical monitoring class is defined to include people living in the Village for one or more years, whether consecutively or not, may respond to this issue as a matter of *definition*, but the inclusive definition does not solve the problem and differences caused by the host of variations of exposure.

in the Village.²⁹ Of course, rare is the case where two residents will have been exposed to exactly the same degree, and Plaintiffs are not charged with the duty of calculating the precise exposure of any given individual, much less all of them, in order to secure class certification. However, Plaintiffs must demonstrate that they can use common proof to demonstrate that each individual was exposed to a level above background levels. This, they have not done.

A recent decision from the District of New Jersey, Rowe v. E.I. DuPont de Nemours and Company, No. 06-1810, 2008 U.S. Dist. LEXIS 103528 (D.N.J. Dec. 23, 2008), is instructive. In Rowe, the court rejected a request for certification for a medical monitoring class under Rules 23(b)(2) and 23(b)(3) based on allegations that perfluorooctanoic acid released from a nearby plant had contaminated the public water supply. Id. at *50. The court determined that “class members’ actual exposure will vary depending on their size and water consumption habits, not to mention their duration of use of the [allegedly contaminated] water supply.” Id. Ultimately, the court denied certification because plaintiffs could not show a “common significant exposure among the class,” or that “all class members are at a distinctive increased risk of disease” as a result of this common exposure. Id. at **50, 58-59; see also Rhodes, 253 F.R.D. at 373, 375-76.

Here, Plaintiffs acknowledge that they need to prove “that each class member was exposed beyond the minimum level necessary to pose a heightened risk – i.e. Plaintiffs need to prove the minimum ‘danger point.’” Pls.’ Reply Br. at 54. However, throughout the three-day class certification hearing, Plaintiffs never articulated an actual minimum vinyl chloride exposure that was common to the entire proposed class – instead focusing on the 0.127 average

²⁹ As noted earlier, according to Plaintiffs’ theories of the case, there is additional variation in exposure depending on whether an individual resident lived directly within the hypothesized purple plume or outside of it. See discussion in footnote 27, supra. See also 6/20/2008 Hr’g Tr. at 112-15; Supp. Affidavit of Roddewig (“Roddewig Supp. Aff.”) at 3.

value, as discussed above - and ducked the Court's "what's the lowest common denominator" question. 6/20/2008 Hr'g Tr. at 83. In a post-hearing submission, Plaintiffs endeavored to answer the Court's question, stating that "the Court need only look at the isopleths, the rings superimposed on the map of the Village, generated by the parties' air dispersion experts," and each "isopleth provides an exposure level for the minimally exposed individual." Pls.' Mem. In Further Supp. of Pls.' Mot. for Class Cert. at 4-5. However, in that same document the Plaintiffs admitted that "[e]ach ring represents the *average* concentration of vinyl chloride exposure for a person residing on the ring itself" – demonstrating once again that Plaintiffs' evidence involves averages and not common minimum exposure above background levels. *Id.* (emphasis added).

In yet a later submission, Plaintiffs again embraced the isopleths, stating that "for each time period there is a minimum exposure drawn by the isopleth that circumscribes the entire Village. If the Class member living exactly upon the isopleth is exposed above background levels, then so is every other Class member, each of whom necessarily has an exposure greater than the minimum represented by the isopleth." Pls.' Suppl. Br. In Supp. of Class Cert. at 3. This argument mistakenly assumes a constant level of exposure for each of the time periods represented by a particular isopleth map. In other words, it assumes that exposure was at one constant value between 1940 and 1967, then at another constant value between 1968 and 1989, and so on. Of course, both the testimony presented by Plaintiffs and common sense reflect that exposure levels did not just change *between* the four time periods artificially designated by Plaintiffs, but also fluctuated *among* the different years within each time period. Therefore, assigning just one air concentration value to the entire 21-year period between 1968 and 1989, for example – especially when the value is based on the highest well reading available – is overly simplistic, not to mention unreliable and, of course, unprovable.

At the end of the day, Plaintiffs themselves point to a fatal flaw in their certification argument. They openly admit that they *cannot* show a common minimum exposure for every Class member that is above the background level:

[The air modeling evidence] does not presently show exposure above background for all Class members for all times because, while it is a complete model, it has been run with incomplete data. Even so, it does show exposure above background for all Class members for the time period before 1990. During the class certification hearing, Plaintiffs . . . introduced testimony from the deposition of Dr. Zannetti that describes additional modeling he currently is undertaking that will result in more accurate, and increased, exposure across the Village, including during later years.

Pls.’ Suppl. Br. In Supp. of Class Cert. at 4; see 06/20/2008 Hr’g Tr. at 76-79. This passage starkly contrasts with Plaintiffs’ acknowledgement in an earlier submission that they needed to prove not just minimum exposure above the background level, but also “that each class member was exposed *beyond the minimum level necessary to pose a heightened risk* – i.e. Plaintiffs need to prove the minimum ‘danger point.’” Pls.’ Reply Br. at 54. Despite their changing tune, Plaintiffs cannot harmonize their way to the requisite common proof.³⁰

³⁰ Plaintiffs assert that they need not demonstrate that every class member ultimately will prevail at trial, and that at trial the Court could parse out the exposure evidence based on specific years, with different findings for each. They state:

if the jury accepts Plaintiffs’ evidence that .07 constitutes a danger point, the fact that some class members might be found not to have been exposed at levels above .07 would not be a bar either to certification or to recovery by the remaining Class members. Depending upon the evidence at the time of trial, the Court may instruct the jury to make specific findings of exposure for certain years, for example, such that the jury could find that Class members in one time period had exposure exceeding the danger point while others did not. In such a case, judgment could issue for part of the Class and not for others, but judgment as to all of the Class members will have been determined by presentation of common evidence.

Pls.’ Mem. in Further Supp. of Pls.’ Mot. for Class Cert. at 5, n.1. Given the evidence presented in this case, the method urged by Plaintiffs would be tantamount to an inappropriate judicial attempt to manufacture common issues from individual issues, not to mention a logistical nightmare, that likely would not alleviate the problems with the proposed class.

In the first place, common proof could not be used to calculate year-specific exposures for every year of the class period, because that method would still depend on year-long (cont...)

c. Significantly Increased Risk of Contracting a Serious Latent Disease

Plaintiffs also must show that each individual class member was exposed to a level of vinyl chloride that “caused each individual plaintiff to have a significantly increased risk of contracting serious latent disease[] thereby demonstrating the need for medical monitoring.” Barnes, 161 F.3d at 145 (affirming decertification of medical monitoring class of smokers suing tobacco companies). This “risk” need only be “a significantly increased risk,” not a medical certainty. See Barnes, 161 F.3d at 138 n.10. An increased *risk* of contracting a disease is a far more general proposition than the actual likelihood of contracting the disease.³¹ This being said, it is impossible to tell from Plaintiffs’ presentation of the *average* level of exposure to vinyl chloride - which itself is based on an *average* of certain vinyl chloride levels that were detected in certain wells - whether *every* class member has “a significantly increased risk of contracting a serious latent disease.” Barnes, 161 F.3d at 138 n.10.

Plaintiffs identify the “danger point” for exposure to vinyl chloride as 0.07 µg/m³. See 6/20/2008 Hr’g Tr. at 84, 88-99; Pls.’ Supplemental Br. In Supp. of Class Cert. at 5. They assert

(cont...) average exposures (and not minimal exposures), and it would not account for people who moved in and out of the Village in the middle of years, or who did not reside in the Village for year-long increments. For example, the exposure level of an individual who moved into the Village in May 2001 and moved out in July 2002 would likely be calculated by using weighted average of the 2001 exposure level and the 2002 exposure level. Yet, that calculation would still be nothing more than a rough average, and would not be sufficient to determine whether the individual was exposed to a level of vinyl chloride above background level, or above a “danger point.”

³¹ For example, the concept of uniform vaccinations for the entire population regardless of individual and family medical histories, immune systems, and genetic disparities is based on the concept of risk. Of course, even if no one was vaccinated, not all human beings would contract every infectious disease. Nevertheless, people are generally considered to be “at risk” simply because the diseases exist; hence, the justification for vaccinations.

that “individuals residing in the Village for one year or more and exposed to vinyl chloride above the background level and above the danger point fall within the cohort for which exposure and epidemiological data support medical monitoring.” Pl.’s Mem. In Further Supp. Of Pl.’s Mot. for Class Cert at 3. This argument suffers from at least two flaws.

The first problem is that the 0.07 value was not developed with an appropriate methodology for calculating a “danger point” for purposes of a medical monitoring claim. The 0.07 value identified by Plaintiffs only reflects the level of vinyl chloride at and below which a “mixed” population is safe, in the opinion of a public health agency. It does not, however, demonstrate the opposite, i.e., that any extra levels above the 0.07 level are significantly harmful.

In Rowe v. E.I. Dupont de Nemours and Co, *supra*, the court rejected the plaintiffs’ use of a risk assessment to identify the “safe” level of exposure, when the assessment was based on the reported *averages* of individuals’ characteristics such as age, sex, weight, medical history, and water consumption patterns. Rowe, 2008 U.S. Dist. LEXIS 103528 at **38-39; *see also Rhodes*, 253 F.R.D at 377 (“risk assessment cannot and does not support an opinion that each individual class member has experienced a significantly increased risk of disease.”). The Rowe court stated, “[w]hile the Rowe Plaintiffs tout the risk assessment method as the ideal means of proving common exposure among the class members, the Court finds that this method establishes nothing more than an assumption of common exposure.” Rowe, 2008 U.S. Dist. LEXIS 103528 at *38.

Similarly, in Rhodes v. E.I. DuPont de Nemours and Co., 253 F.R.D. 365 (S.D. W.V. 2008), the court stated that:

[a risk assessment] is of limited utility in a toxic tort case, especially for the issue of causation, because of the risk assessment's distinct purpose. Risk assessments have largely been developed for regulatory purposes and thus serve a protection function in providing a level below which there is no appreciable risk to the general population. They do not provide information about actual risk or causation. . . .Because of their appropriately prudent assumptions when there are limited data, risk assessments intentionally encompass the upper range of possible risks.

Id. at 377 (internal quotation and citation omitted). See also Sutera v. Perrier Group of Am. Inc., 986 F. Supp. 655, 664 (D. Mass. 1997) (rejecting regulatory standards as a measure of causation because the purpose of regulatory standards is to “reduce public exposure to harmful substances”) (quoting Allen v. Pennsylvania Eng'g Corp., 102 F.3d 194, 198 (5th Cir. 1996)); O'Neal v. Dep't of the Army, 852 F.Supp. 327, 333 (M.D. Pa. 1994) (determining that risk figures based on the EPA's upper-bound estimates for a chemical are “appropriate for regulatory purposes in which the goal is to be particularly cautious [but] overstate the *actual* risk and, so, are inappropriate for use in determining whether medical monitoring should be instituted.”) (emphasis in original).

As Dr. Ginsberg himself recognized, the 0.07 number is only a “screening target.” See 6/20/2008 Hr'g Tr. at 81, 102. As such, the Court concludes that the 0.07 value may be appropriate as a prophylactic safety marker, perhaps for regulatory use, to minimize *potential* risks and protect the groundwater and air of a mixed population of individuals such as those in the Village. See 6/20/2008 Hr'g Tr. at 120-22. However, it ought not be used as a predictive measure of *actual* risks for every individual in that population. “[P]recautionary measures to keep the general population safe are a fundamentally distinct form of relief from the medical monitoring cause of action.” Rhodes, 253 F.R.D. at 380. “Medical monitoring, as a common

law tort, requires more certainty than that provided by an estimate of the ‘upper range of possible risks.’” Rhodes, 253 F.R.D. at 377 (quoting Allen, 102 F.3d at 198). ²³

The second flaw in Plaintiffs’ arguments is that, even if the 0.07 value were an appropriate “danger point,” which it is not, Plaintiffs’ evidence does not reflect that *all* class members were exposed to a level of vinyl chloride above 0.07, or that this inquiry can be addressed with common proof. As discussed above, Plaintiffs’ evidence says nothing about the actual exposure of each putative class member, only about the fictional average exposure. The Court must conclude in this case, given the nature of the facts and circumstances, nothing short of an individualized inquiry could determine whether class members were exposed to a level of vinyl chloride above 0.07. ³³

³² The limitations of public health risk assessments become even more apparent when examining the different screening targets in relation to one another. For instance, the Occupational Safety and Health Administration PEL standard for vinyl chloride exposure is thousands of (cont . . .) (cont . . .) times higher than the 0.127 average value calculated for the putative Medical Monitoring Class (let alone the 0.07 value that Plaintiffs assert as a danger point). See 6/20/2008 Hr’g Tr. at 118-24; Valberg Report at 24, 32 (noting that the OSHA standard for vinyl chloride in the workplace is 2,560 µg/m³). Dr. Ginsberg also testified that the “most current de minimis risk level or comparison benchmark is actually 0.16.” and explained that the 0.07 figure was for a “mixed population” of adults and children because children are more susceptible to the effects of vinyl chloride. See 6/20/2008 Hr’g Tr. at 80-81.

As a prophylactic societal safety measure, it may well make sense to have a higher exposure safety guideline for a population of working adults than for a population of resident adults or for a population of children. However, it is also apparent that the OSHA level or the 0.16 level may apply to at least *some* members of the proposed class, namely those adults who typically spend 40 hours in the Village per week. For those adults, Plaintiffs would be arguing that a level of exposure far less than the OSHA guideline is a “danger point.” See 06/20/2008 Hr’g Tr. at 92, 101-04.

³³ Moreover, many of the same individual issues discussed earlier regarding exposure beyond background levels, also apply here regarding exposure at a level that carries a significantly increased risk of a latent disease. “Whether a plaintiff has a significantly increased risk of contracting a latent disease requires an individualized inquiry that takes into account, among other things, the person’s medical profile, personal risk factors and family history.” Lipinski v. Beazer East, Inc., 76 Pa. D.&C.4th 479, 504 (Pa. Com. Pl. Oct. 18, 2005), aff’d, 909 (cont...)

d. Whether the Proposed Monitoring Regime is “Reasonably Necessary”

The Court now turns to the question of whether the prescribed monitoring regime (that is, serial MRI exams) is reasonably necessary according to contemporary scientific principles. In Barnes v. American Tobacco Company, the Third Circuit Court of Appeals determined that a medical monitoring program cannot be left open for the class members to fashion at will, but must consist of a specific form of monitoring different from what class members would ordinarily receive from regular physicals. The court stated:

[E]ach class member must prove that the monitoring program he requires is different from that normally recommended in the absence of exposure. To satisfy this requirement, each plaintiff must prove the monitoring program that is prescribed for the general public and the monitoring program that would be prescribed for him. Although the general public’s monitoring program can be proved on a classwide basis, an individual’s monitoring program by definition cannot.

Barnes, 161 F.3d at 146 (internal quotations omitted).³⁴ See Rowe, 2008 U.S. Dist. LEXIS 103528, at *59; Rhodes, 253 F.R.D. at 380.

Accordingly, Rohm and Haas argues that the Court must determine the propriety of Plaintiffs’ serial MRI proposal at the certification stage of this case. Georgine, 83 F.3d at 626 (monitoring “will depend on singular circumstances and individual medical histories). Rohm

(cont...) A.2d 896 (Pa. Super 2006).

³⁴ Plaintiffs attempt to distinguish Barnes v. American Tobacco Company on the grounds that it involved voluntary exposure to tobacco, not involuntary chemical exposure. However, this factual difference does not negate the significance of Barnes with respect to whether a particular monitoring program is appropriate for a given individual. Nevertheless, the Court recognizes that, Barnes notwithstanding, certification still can be appropriate in certain toxic tort cases where the environmental exposure is of limited duration and geography, and a minimum exposure above background levels can be shown for all class members, which exposure carries a significantly increased risk. However, the theories and evidence in this case are not nearly so straightforward or manageable and, hence, make certification entirely too awkward and inappropriate.

and Haas argues that the serial MRI proposal is inappropriate for an asymptomatic patient population like the proposed class, and cannot be cured by modifications such as options for CAT scans, limiting the number of MRI tests to be given based on length of exposure, or substituting neurological exams for subsequent MRI exams. In support of these arguments, Rohm and Haas principally relies on the expert report and testimony of Dr. Friedman.

Plaintiffs dispute this, arguing that serial MRIs are reasonable for the proposed Medical Monitoring Class, and that in any event, the Court and Plaintiffs may modify the scheme after certification or allow individuals to tailor it to their particular circumstances (for example, a CAT scan for people who cannot tolerate MRIs). Plaintiffs submit the report of Dr. Neiman, who opines that serial MRIs and neurology examinations as well as other tests should be carried out for the proposed class members.

The Court would not need to resolve this issue, given that the Court has already determined that certification is inappropriate due to Plaintiffs' inability to demonstrate that all class members were exposed to a minimal level of exposure above background levels, let alone above a "danger point" that carries an increased risk. That being said, the Court observes that the problematic basis for issuing a blanket prescription for serial MRIs in asymptomatic individuals, coupled with the risks and drawbacks of serial MRI procedures, only strengthens the denial of class certification.

For instance, the proposed class includes all residents of the Village, including children. The administration of MRIs to young children presents certain challenges because the children must lie still in the MRI machine for long periods of time. Conducting MRIs on children may require administering drugs to sedate or anesthetize them, a process that may prompt side effects of its own. Report of Henry S. Friedman, M.D. at 2. Also, MRIs require the use of a contrast

agent (gadolinium), which is injected into the patient's vein. The contrast agent may pose risks for patients with kidney disease, for whom it can lead to nephrogenic systemic fibrosis, a potentially fatal condition; therefore, gadolinium is not recommended for use with such patients.

Id. In addition, medical monitoring in general, and MRIs in particular, can lead to stress and other adverse psychological consequences, and may induce claustrophobia in some patients.³⁵

Plaintiffs assert that individual differences and medical needs can be accommodated through the use of CAT scans, open MRI machines, and other neurological exams. However, the determination of *which* accommodation, if any, is appropriate for *which* patient necessarily involves individual questions that cannot be determined on a classwide basis. And even if the risks of an MRI for a particular patient could be ameliorated or at least minimized, it is far from clear that “informed physicians, unaffected by litigation considerations, would recommend routine monitoring” with MRIs in asymptomatic patients such as the proposed class members.

In re Rezulin Prods. Liab. Litig., 210 F.R.D. 61, 73 (S.D. N.Y. 2002). On the record in this case, the Court is persuaded by the testimony of Dr. Friedman:

People should be treated as individuals. The decision to get an MRI . . . is an individual decision that you need to make each and every time . . . [E]ach person is different. Each person will have difference signs, symptoms, will have a different medical story that may lead a physician to order an MRI or to not order an MRI.

6/13/2008 Hr'g Tr. at 149. See also id. at 140-42.³⁶

³⁵ Indeed, given the potential drawbacks, even Dr. Neiman failed to identify a comprehensive medical-monitoring protocol that would apply to all proposed class members. See Neiman Report at 4 (stating that she could not yet provide full description of tests for protocol).

³⁶ Plaintiffs argue that Dr. Friedman's opinion (that individual circumstances matter) *itself* applies to the entire proposed class, and therefore favors certification. It is unclear why it could be useful to this analysis to state the obvious, i.e., that saying “everyone is unique” is a statement that can and does apply to everyone. In any event, Plaintiffs' is a strained reading of Dr. Friedman's opinion. Reading Dr. Friedman's opinion in context, it is clear that it is not (cont...)

To be sure, Plaintiffs have submitted evidence that the false positive rate for MRIs is low and the screening of asymptomatic individuals may be beneficial. See Report of Melissa Neiman, M.D (“Neiman Report”).³⁷ However, this evidence is not persuasive, when weighed against the contrary testimony of Dr. Friedman, as well as other evidence submitted by Rohm and Haas. See Komotar, R., “Brain Magnetic Resonance Imaging Scans for Asymptomatic Patients: Role in Medical Screening,” Mayo Clinic Proceedings, 83:5, at 563-65 (May 2008) (Exh. 3 to Rohm and Haas Motion to Supplement the Record).

Moreover, the problems with the monitoring scheme can not be alleviated by a decision to just “deal with it later” at the summary judgment stage. Although the parties and the Court may alter a monitoring scheme long after the certification stage of the litigation has passed, that does not mean that problems with a monitoring plan can be ignored at the certification stage. See Barnes, 161 F.3d at 146. To determine that medical monitoring is “reasonably necessary,”

(cont...) “classwide” inasmuch as he opines that every medical monitoring decision must be made by each patient and his or her physician, based on the individual characteristics and medical history of the patient and not on a perfunctory screening or a Court’s endorsement of class-wide MRI screenings. Examining the evidence, the Court agrees.

³⁷ By letter to the Court dated August 22, 2008, defense counsel requested that the record be supplemented to include Dr. Neiman’s complete deposition testimony, and enclosed a copy. Having reviewed this testimony, the Court determines that it adds nothing new to the Court’s analysis on class certification. In the event that Rohm and Haas still wishes to supplement the record with respect to this testimony following the Court’s decision on certification, Rohm and Haas may file a motion to supplement the record, which the Court will consider in due course. See e.g., Order issued August 4, 2008, Docket No. 215 (granting in part and denying in part Rohm and Haas’s Motion to Supplement the Record).

the Court must necessarily consider whether such monitoring is possible, and examine the proposed scheme to determine its viability. ⁸³

2. Medical Monitoring Class – Certification Under Rule 23(b)(2)

a. “Generally Applicable” Conduct and Injunctive Relief

Rule 23(b)(2) permits certification when “the party opposing the class has acted or refused to act on grounds generally applicable to the class, so that final injunctive relief or corresponding declaratory relief is appropriate respecting the class as a whole.” Fed. R. Civ. P. 23(b)(2). Therefore, to secure certification under Rule 23(b)(2), Plaintiffs must demonstrate that Rohm and Haas’s conduct is “‘generally applicable’ to the class and that the relief they seek is primarily injunctive.” Rowe, 2008 U.S. Dist. LEXIS 103528 at *29 (citing 7AA Wright & Miller § 1775, at 41); Contawe v. Crescent Heights of America, Inc., No. 04-2304, 2004 U.S. Dist. LEXIS 25746, *13 (E.D. Pa. Dec. 21, 2004).

Here, the Court assumes without deciding that Rohm and Haas’s conduct is “generally applicable” to the medical monitoring class, inasmuch as Rohm and Haas allegedly has released some amount of vinyl chloride that potentially affected the members of the proposed monitoring class. Also, Plaintiffs’ request for a court-ordered, court-supervised medical monitoring program can be considered a request for injunctive relief. See Barnes, 161 F.3d at 131-32; Rowe, 2008 U.S. Dist. LEXIS 103528 at *30-31; see also In re Welding Fume Prods. Liab. Litig., 245 F.R.D. at 279, 290. Nevertheless, the Court must deny certification for lack of cohesiveness, as explained below.

³⁸ Although a monitoring scheme can always be altered later, courts addressing class certification in similar contexts have considered contemporaneously whether the proposed medical monitoring scheme is “medically necessary” for *everyone* in the class. See, e.g., Barnes, 161 F.3d at 146.

b. Cohesiveness

“While 23(b)(2) class actions have no predominance or superiority requirements, it is well established that the class claims must be cohesive.” Barnes, 161 F.3d at 143. “[A] (b)(2) class may require more cohesiveness than a (b)(3) class because in a (b)(2) action, unnamed members are bound by the action without the opportunity to opt out.” Id. at 142-43.³⁹ “[T]he district court has the discretion to deny certification in Rule 23(b)(2) cases in the presence of disparate factual circumstances.” Id. at 143 (internal quotation omitted); see Henry v. St. Croix Alumina, LLC, No. 99-0036, 2008 U.S. Dist. LEXIS 43755, *29 (D.V.I. June 3, 2008). “The determination of whether a class involves individualized issues is important for two reasons: (1) ‘unnamed members with valid individual claims are bound by the action without the opportunity

³⁹ There is some debate as to whether Rule 23(b)(2) or Rule 23(b)(3) is more strict with respect to class certification. On one hand is the position stated in Barnes, *supra*, as just expressed in the text. On the other hand, some courts have noted that Rule 23(b)(3) may be more “stringent” than Rule 23(b)(2) because of the predominance requirement. See Plymouth County Nuclear Info Comm., Inc. v. Boston Edison Co., 655 F.2d 15, 18 n.7 (1st Cir. 1981); In re Welding Fume Prods. Liab. Litig., 245 F.R.D. 279, 290, n.55 (N.D. Ohio 2007).

Plaintiffs contend that the Court could allow “opt-outs” here even if it decided to certify the medical monitoring class under Rule 23(b)(2). See 6/13/2008 Hr’g Tr. at 209-10; 6/20/2008 Hr’g Tr. at 44-45; Allison v. Citgo Petroleum Corp., 151 F.3d 402, 418 n.13 (5th Cir. 1998) (affirming district court’s denial of class certification under Rule 23(b)(2), but noting the possibility of allowing opt-outs in a Rule 23(b)(2) class in civil rights cases, providing that the other criteria for class certification have been met); Eubanks v. Billington, 110 F.3d 87, 96 (D.C. Cir. 1997). However, it is not clear that the Court has the authority to allow opt-outs from a (b)(2) class in the context of this case, or that it would even make sense to do so. McLain v. Lufkin Indus., Inc., 519 F.3d 264, 283 (5th Cir. 2008) (affirming denial of certification of a (b)(2) class because of tension between claimants with monetary damages and those seeking injunctive relief). See also Thomas v. Albright, 139 F.3d 227, 233-37 (D.C. Cir. 1998) (noting that Eubanks permits opt-outs in a Rule 23(b)(2) class if certain criteria have been met, but holding that the district court had abused its discretion in allowing class members to opt out of a Rule 23(b)(2) settlement class on the evidence presented). Notably, the Court must observe that the Third Circuit Court of Appeals has stated that allowing opt-outs from (b)(2) classes would “defeat the fundamental objective of (b)(2), to bind the members of the class with one conclusive adjudication.” Kyriazi v. W. Elec. Co., 647 F.2d 388, 393 (3d Cir. 1981) (internal quotation marks omitted).

to withdraw and may be prejudiced by a negative judgment in the class action[;]' and (2) 'the suit could become unmanageable and little value would be gained in proceeding as a class action . . . if significant individual issues were to arise consistently.' Rowe, 2008 U.S. Dist. LEXIS 103528, *30 (quoting Barnes, 161 F.3d at 143) (alterations in original). "At base, the (b)(2) class is distinguished from the (b)(3) class by class cohesiveness Injuries remedied through (b)(2) actions are really group, as opposed to individual injuries. The members of a (b)(2) class are generally bound together through preexisting or continuing legal relationships or by some significant common trait such as race or gender." Barnes, 161 F.3d at 143 n.18 (3d Cir. 1998) (internal quotations omitted, alterations in original). "Indeed, a 'court should be more hesitant in accepting a (b)(2) suit which contains significant individual issues than it should under subsection 23(b)(3)." Henry, 2008 U.S. Dist. LEXIS 43755 at *29 (quoting Santiago v. City of Phila., 72 F.R.D. 619, 628 (E.D. Pa. 1976)).

The individual issues that defeat the predominance requirement of Rule 23(b)(3) also defeat the cohesion requirement of Rule 23(b)(2).⁴⁰ Once again, the level(s) of vinyl chloride to which *each* class member was exposed is the key consideration. Because Plaintiffs cannot use common proof to show that every proposed class member (or even any given class member) was exposed to a minimum level of vinyl chloride above background levels - let alone above a "danger point" - the very composition of the class depends on individual issues, precluding

⁴⁰ But see Gibbs v. E.I. DuPont De Nemours & Co., Inc., 876 F. Supp. 475, 481 (W.D.N.Y. 1995) (certifying an exposure-only medical monitoring class under Rule 23(b)(2)); Yslava, 845 F. Supp. at 713 ("When class certification is sought in the alternative under 23(b)(2) and (b)(3), the 23(b)(2) class is preferred."). See also Werlein v. United States, 746 F. Supp. 887, 895 (D. Minn. 1990) (concluding, in another context, that "[i]n a case where a number of persons are exposed to a toxin about which little is known, and it is necessary to gather and share information regarding diagnosis and treatment through screening, the Court would consider framing a medical monitoring and information sharing program as injunctive relief").

cohesiveness. The presence and significance of the other individual issues discussed with respect to predominance are equally relevant here, and further support denial of certification under Rule 23(b)(2).⁴¹

Plaintiffs stress that Rohm and Haas has “no answer to perhaps the most compelling fact about the McCullom Lake community: [t]here is an extraordinary cluster of brain cancer cases concentrated in time and concentrated in location. Many times, the Court was show[n] maps of the area; there simply is nothing else around to explain why so many people have developed brain tumors.” Pls.’ Mem. in Further Supp. of Pls.’ Mot. for Class Cert. at 2; see also Pls.’ Reply Br. at 32 and Report of Richard Neugebauer at 36-37. Nonetheless, unless they meet the immutable legal requirements, an assorted cluster of brain cancer diagnoses in the Village, while puzzling, frustrating and, above all, certainly tragic on a human level, together with counsel’s compassionate and dramatic rhetoric that is designed to capture the Court’s attention, do not alter the Court’s analysis of the requirements of Rule 23 and the necessity of *common* proof to demonstrate a minimal level of exposure beyond background level or significant increased risk. All things considered, and recognizing that the individuals who actually do suffer from brain cancer are free to pursue Rohm and Haas individually, certification is not warranted on the record presented to the Court.

⁴¹ The Northern District of Ohio has noted that federal courts were more willing to certify medical monitoring cases under Rule 23(b)(2) in the 1990's than they are today. See In re Welding Fume Prods. Liab. Litig., 245 F.R.D. at 314. Whether or not there is a trend against certification in medical monitoring cases, given the numerous individual issues in this case, the Plaintiffs’ reliance on crudely-drawn averages, and the strict certification requirements handed down by the Third Circuit Court of Appeals in In re Hydrogen Peroxide Antitrust Litigation, the Court is satisfied that certification here would be improper.

3. Property Damage Class - Certification Under Rule 23(b)(3)

a. The Nature of Plaintiffs' Claims

As noted, Plaintiffs have brought numerous claims on behalf of the purported "property class" for "compensatory relief to provide monetary damages for lost property values in the community." Pls.' Mot. for Class Cert. at 2.⁴² The substantive causes of action asserted on behalf of this class are: public nuisance, private nuisance, strict liability, CERCLA, conspiracy, negligence, negligence per se, and trespass. The Court has already ruled that there is sufficient evidence of present contamination to defeat summary judgment for Rohm and Haas on the named Plaintiffs' property claims. See Memorandum and Order issued July 30, 2008; see also Memorandum and Order issued May 3, 2007. However, each class member's individual property claims are potentially different so that a class may not be certified as to those claims.

Plaintiffs' property class claims have not attracted much of the parties' attention during the certification proceedings. Nevertheless, Plaintiffs' motion for class certification does set forth the elements (in part) of each of the property claims. Plaintiffs' motion and reply in support also, very briefly, set forth the "common questions" that Plaintiffs claim will dictate whether all class members can satisfy the elements of each claim. Pls.' Mot. for Class Cert. at 38-43; Pls.' Reply Br. at 43-45. These submissions make plain that Plaintiffs plan to try to prove the Property Class's claims by showing that the properties at issue were actually contaminated. For example, Plaintiffs claim as a common question whether Rohm and Haas's acts "contaminated the air and water supply of McCullom Lake Village," whether Rohm and Haas's

⁴² The Plaintiffs originally moved for class certification in October 2006, but, as with their medical monitoring claim, substantially revised their proposed Property Class in their Reply Brief.

acts “contaminated private wells throughout McCullom Lake Village,” whether Rohm and Haas “caused [certain chemicals] to enter private wells in McCullom Lake Village.” Pls.’ Mot. for Class Cert. at 38-40. At the class certification hearing, Plaintiffs stated in regard to their property claims that

the liability issue is Was there exposure[?] Was there an impact[?] And that’s a question of whether vinyl chloride got there and did it get there in an amount that constitutes, as a matter of law, an injury.

06/20/2008 H’rg Tr. at 29. To make their class-wide showing, Plaintiffs rely on the same expert testimony that they offered to support their medical monitoring claim.

b. Predominance Requirement of Rule 23(b)

As an initial matter, Plaintiffs’ property claims, like their medical monitoring claims, must rely solely on airborne contamination from the orange plume. This is because Plaintiffs’ expert, Dr. Ginsberg, admitted that contamination from the purple plume would not have affected all property in the Village. See e.g., 06/20/2008 Hr’g Tr. at 112-15.

The parties seem to agree that not all issues relating to the property class’s claims can be satisfied as part of a class proceeding. Rohm and Haas argues that, although questions relating to its own conduct may be common, the effect, if any, of its contamination on the property values claimed to be lost here will vary by property. Rohm and Haas Surreply Br. at 58-59. In support of this argument, Defendants proffer the expert report of a realtor. See Affidavit of Richard Roddewig at ¶ 8.F. Rohm and Haas also argues that, even assuming that every property can be found to be contaminated (and thus “injured” in some way), Rohm and Haas still “would have the right to prove that contamination allegedly affecting an individual property came from a source other than [its] plant.” Rohm and Haas Surreply Br. at 60.

Plaintiffs acknowledge that “both the fact of, and amount of, damage may vary for individual homes across the Village.” Pls.’ Mem. In Further Supp. of Pls.’ Mot. for Class Cert. at 10. But, Plaintiffs cast their proposed class as a “liability” class and argue that Defendants’ arguments merely go to the measure of damages “which will be handled after the liability issues are determined,” at the class trial. 06/20/2008 Hr’g Tr. at 28-29. Plaintiffs therefore do not present any expert testimony of their own regarding the fact or extent of property damage. Instead, Plaintiffs argue the bifurcation of the property claims and that “the extent of that variation in the fact and amount of damage” can be addressed by such bifurcation. Pls.’ Mem. in Further Supp. of Pls.’ Mot. for Class Cert. at 10.

Even assuming that the fact of contamination was provable by common proof here, liability alone cannot be proven with common proof. Rohm and Haas essentially argues that Plaintiffs cannot prove causation on a class-wide basis – that plaintiffs cannot prove that any contamination that is present on the at-issue properties was (1) there because of Rohm and Haas, and (2) that it had any effect. “Common evidence may offer one potential source of those contaminants, but many other explanations may exist that are specific to a particular property.” Fisher v. Ciba Specialty Chems. Corp., 238 F.R.D. 273, 307 (S.D. Ala. 2006); see also Thomas v. FAG Bearings Corp., 846 F. Supp. 1400, 1404 (W.D. Mo. 1994) (individual issues as to causation and damages with respect to each class member and each property “overshadow[ed]” the “undoubtedly common issues of law and fact, such as whether [defendant] released TCE into the groundwater”). This can be especially true in this case, where, as discussed above, differing levels of potential contamination from the orange plume over time affected different portions of the Village to different extents, depending on location, all of which must be compared to “contamination” from the background level. See also Rowe, 262 F.R.D. at 463-64 (denying

certification of proposed property class with respect to claim for trespass, because plaintiffs' theory required showing that contamination existed in each subject property and that contamination was fault of defendant, which were individualized inquiries).

These concerns are somewhat ameliorated if Plaintiffs choose to pursue a case for contamination in the past, as opposed to contamination that arguably continues to today. But see Memorandum and Order issued July 30, 2008 (finding sufficient evidence to support a showing of present contamination for purposes of denying motion for partial summary judgment).⁴³ Even so, other issues beyond causation, such as “the extent of such contamination, the cause and timing of harm, and the resulting damage (measured in diminution of property value) are all questions that will require plaintiff-by-plaintiff scrutiny” and would remain unanswered in a class proceeding. LaBauve v. Olin Corp., 231 F.R.D. 632, 673 (S.D. Ala. 2005).

Of course, “the necessity of calculating damages on an individual basis will not necessarily preclude class certification.” Steering Comm. v. Exxon Mobil, Corp., 461 F.3d 598, 602 (5th Cir. 2006). Plaintiff would cast the LaBauve concerns as “damages” issues not relevant to its “liability” class. But whether all members of the class actually suffered an economic injury is a question of liability, not damages. See Newton v. Merrill Lynch, Pierce, Fenner & Smith, Inc., 259 F.3d 154, 188 (3d Cir. 2001) (“Even assuming plaintiffs' ability to calculate damages, the District Court held this did not exempt them from proving each class member suffered economic injury.”).

⁴³ The Court notes that if Plaintiffs were to pursue a theory of “past contamination” leading to stigma and lost value, issues such as whether stigma was the result of actual contamination or simply because of publicity would vary from property to property.

Regardless, as Plaintiffs admit, damages – both the fact of and extent of – are questions that would remain following the class-wide determination of any common issues. Although this is not a fact that dictates a finding of no predominance, Steering Comm., 461 F.3d at 602, it certainly must be factored into the weighing for predominance, Steering Comm., 461 F.3d at 602 (“[W]here individual damage cannot be determined by reference to a mathematical or formulaic calculation, the damages issue may predominate over any common issues shared by the class.”), but see Mejdrech v. Met-Coil Sys. Corp., 319 F.3d 910 (7th Cir. 2003) (holding that individual questions as to whether TCE contamination reached class members’ properties and whether harm was suffered did not predominate over class-wide issues such as whether defendant leaked TCE in the first place).

On balance, the Court finds that common issues do not predominate as to Plaintiffs’ property damage claims. Although many aspects of Plaintiffs’ claims may be common questions, the parties agree that resolution of those questions leaves significant and complex questions unanswered, including questions relating to causation of contamination, extent of contamination, fact of damages, and amount of damages. Although Plaintiffs invite the Court to “carve[] at the joints” of their property claims to resolve certain common issues in a class proceeding and leave claimant-specific issues to individual follow-on proceedings, see Mejdrech, 319 F.3d 911, this Court, mindful of the admonition that it is to consider the claims as a whole and not to “manufacture predominance through the nimble use” of such carving, Castano Am. Tobacco Co., 84 F.3d 734, 745 n.21 (5th Cir 1996), declines to do so here.

4. Superiority Requirement of Rule 23(b)(3), as it Pertains to Medical Monitoring Class and Property Damage Class

To certify a class under Rule 23(b)(3), the Court must also determine that “a class action is superior to other available methods for the fair and efficient adjudication of the controversy.” Fed. R. Civ. P. 23(b)(3). Several factors are relevant to the superiority inquiry: “(A) the class members’ interests in individually controlling the prosecution or defense of separate actions; (B) the extent and nature of any litigation concerning the controversy already begun by or against class members; (C) the desirability or undesirability of concentrating the litigation of the claims in the particular forum; and (D) the likely difficulties in managing a class action.” Fed. R. Civ. P. 23(b)(3). In effect, “[t]he superiority requirement asks the court to balance, in terms of fairness and efficiency, the merits of a class action against those of alternative available methods of adjudication.” In re Prudential Ins. Co., 148 F.3d at 316 (internal quotation marks omitted).

Here, the Court need not conduct an analysis of the superiority requirement with respect to either of the proposed classes, because the Court already has determined that certification is inappropriate for both. Nevertheless, the Court’s concerns about the number, complexity, and scope of issues that the parties recognize are plaintiff-by-plaintiff determinations also go to the superiority issue. Even if the Court were to certify common issues, the subsequent separate proceedings necessary for each plaintiff would undo whatever efficiencies such a class proceeding would have been intended to promote. Even more problematic, because a jury may be called upon to weigh the potential impact from Rohm and Haas’s actions on a particular property against those of another source of contamination, the “second” jury could well wind up re-considering the evidence of Rohm and Haas’s actions presented in the class proceeding.

Because it appears that a class proceeding would not promote much efficiency, if any, the Court finds that it is not superior to individual proceedings.⁴⁴

5. Rule 23(c), as it Pertains to Medical Monitoring Class and Property Damage Class

Pursuant to Rule 23(c), “a court has the inherent power and discretion to redefine and modify a class in a way which allows maintenance of an action as a class action.” In re Methyl Tertiary Butyl Ether (“MTBE”) Prods Liab. Litig., 241 F.R.D. 435, 438 (S.D.N.Y. 2007) (internal quotation omitted). “This discretion allows the Court to change the composition of the class itself, or to confine the issues that will be included in the class trial.” In re Welding Fume Prods. Liab. Litig., 245 F.R.D. at 312 (internal citations omitted). Conceivably, the Court could address some of the problems discussed above by trying only certain common issues (e.g. whether there exist medical tests for early detection of vinyl chloride-induced brain cancer, whether vinyl chloride was released from Rohm and Haas’s facility, or whether exposure to vinyl chloride can increase the risk of developing brain cancer). However, given the circumstances of this case, and the risk that by doing so the Court could instead create serious problems in an attempt to “manufacture” adherence to the requirements of Rule 23 “through the nimble use of subdivision (c)(4),” the Court declines to invoke Rule 23(c)(4) for either of the proposed classes. See id. at 312-13 (discussing the use of Rule 23(c) and collecting cases).

⁴⁴ The Court also notes that a class proceeding that only goes forward on the *orange plume* theory might result in claims preclusion later on, regarding currently existing *purple plume* theories. This potential could be of grave concern to plaintiffs with purple plume cases, as the Plaintiffs’ experts have stated that plaintiffs with property over the purple plume would have a much more direct and much greater amount of contamination on their property, and may also have contaminated ground water. See, e.g., 06/20/2008 Hr’g Tr. at 113-14.

IV. CONCLUSION

For the reasons above, Plaintiffs' Motion for Class Certification is denied. An Order consistent with this Memorandum follows.

BY THE COURT:

S/Gene E.K. Pratter
GENE E.K. PRATTER
UNITED STATES DISTRICT JUDGE